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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,513	11/30/2001	Gregory T. Noren	1662-50500 JMH (P99-2795)	6516
23505	7590	01/11/2005	EXAMINER	
CONLEY ROSE, P.C. P. O. BOX 3267 HOUSTON, TX 77253-3267			CHEN, CHONGSHAN	
			ART UNIT	PAPER NUMBER
			2162	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,513

Applicant(s)

NOREN, GREGORY T.

Examiner

Chongshan Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to Amendment filed on 26 July 2004. Claims 1-29 are pending in this Office Action.

Response to Arguments

2. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 1 recites the limitation "(e) deleting said original version of the file; and (f) using the transformation operator to recover the original version of the file". It is unclear why the invention deletes said original version of the file and then recovers it, and how the original version of the file is recovered (by applying the transformation operator to the new file)?
6. Claims 2-9 are rejected because of dependency.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4, 8-13, 17-19 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker et al. (hereinafter "Parker", US 6,366,930 B1).

As per claim 1, Parker discloses a method of backing up a file, comprising:

(b) saving said new version (Parker, col. 2, line 23, "storing the current version");

(c) computing a transformation operator which is indicative of the differences between the original version of the file and the new version (Parker, col. 2, lines 21-23, "computing the differences between the two previous and current versions to provide a forward delta and reverse delta");

(d) saving said transformation operator (Parker, col. 2, lines 23-24, "storing ... the reverse delta of the changed file");

(e) deleting said original version of the file (Parker, col. 2, lines 24-25); and

(f) using the transformation operator to recover the original version of the file (Parker, col. 2, lines 30-34, "to restore any requested file if it is located on-site by recovering the current version and subtracting the appropriate reverse deltas therefrom until the requested file is produced").

Parker does not explicitly disclose (a) making a change to an original version of a file thereby creating a new version of the file. However, Parker discloses detect the precise changes

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made to a prior file in the system ... computing the differences between the two previous and current version (Parker, col. 2, lines 18-19). It is obvious that the system of Parker makes a change to an original version of a file thereby creating a new version of the file. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Parker by making a change to an original version of a file. The motivation being to creating a new version of file from the old version.

As per claim 2, Parker teaches all the claimed subject matters as discussed in claim 1, and further teaches saving said transformation operator in a separate file (Parker, col. 2, lines 18-67).

As per claim 3, Parker teaches all the claimed subject matters as discussed in claim 2, and further teaches said separate file containing said transformation operator is stored on a storage medium that also contains said new file version (Parker, col. 2, lines 18-67).

As per claim 4, Parker teaches all the claimed subject matters as discussed in claim 3, except for explicitly disclosing said storage medium comprises a RAID storage subsystem. However, it is well known in the art that the RAID storage offers the customer data integrity by writing the same data on two or more drives. If one drive fails, the data is still intact on the other drive. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Parker by incorporating the RAID storage. The motivation being to protect the data from the storage failure.

As per claim 8, Parker teaches all the claimed subject matters as discussed in claim 1, and further teaches making a further change to said new file version to create a second new file version, saving said second new file version, computing a second transformation operator which

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is indicative of the differences between the new file version and the second new file version, and saving said second transformation operator (Parker, col. 2, lines 18-67).

As per claim 9, Parker teaches all the claimed subject matters as discussed in claim 1, and further teaches making a further change to said new file version to create a second new file version, saving said second new file version, computing a second transformation operator which is indicative of the differences between the original file version and the second new file version, and saving said second transformation operator (Parker, col. 2, lines 18-67).

Claims 10-13, 17-19 and 23-26 are rejected on grounds corresponding to the reasons given above for claims 1-4 and 8-9.

9. Claims 5-7, 14-16, 20-22 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker et al. (hereinafter "Parker", US 6,366,930 B1) in view of Lash (Pub. No.: US 2002/0188665 A1).

As per claim 5, Parker teaches all the claimed subject matters as discussed in claim 1, and further teaches computing the difference between the old and new version of the file (Parker, col. 2, lines 18-67). Parker does not explicitly disclosing said transformation operator includes a difference value, said difference value being the difference between a numerical value in the original file version and a numerical value in the new file version. Lash teaches said transformation operator includes a difference value, said difference value being the difference between a numerical value in the original file version and a numerical value in the new file version (Lash, page 5, [0053]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the difference file of Parker by incorporating the difference of numerical value of the old and new version of file as disclosed by

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Lash (Lash, page 5, [0053]) in the difference file of Parker. The motivation being to identify the difference between numerical values in the old and new version of file.

As per claim 6, Parker teaches all the claimed subject matters as discussed in claim 1, and further teaches computing the difference between the old and new version of the file (Parker, col. 2, lines 18-67). Parker does not explicitly said transformation operator includes words or binary encoded values that have been deleted from the original file version to produce the new file version. Lash teaches said transformation operator includes words or binary encoded values that have been deleted from the original file version to produce the new file version (Lash, page 5, [0053]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the difference file of Parker by including information whether words or binary encoded values that have been deleted from the original file to produce the new file as disclosed by Lash (Lash, page 5, [0053]). The motivation being to identify the difference between the old file and the new file.

Claim 7 is rejected on grounds corresponding to the reasons given above for claim 6.

Claims 14-16, 20-22 and 27-29 are rejected on grounds corresponding to the reasons given above for claims 5-7.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (571)272-4031. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571)272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chongshan Chen
January 3, 2005


JEAN M. CORRIELLUS
PRIMARY EXAMINER